

# BEST AVAILABLE COPY

Application Serial No. 09/385,584

## IN THE CLAIMS:

Please note that all of the claims that are currently pending and under consideration in the above-referenced application are shown below, in clean form, for clarity. A marked-up version showing the changes that have been made to each of the amended claims is also enclosed.

Please amend the claims as follows:

C1  
33. (Twice amended) A pre-formed solder mask, comprising:  
a film of mask material comprising a polymer and having a substantially uniform thickness; and  
at least one open aperture formed through said film and located correspondingly within said film  
to a contact pad location of a substrate upon which the pre-formed solder mask is to be  
disposed, said at least one open aperture configured to define a peripheral shape of a  
conductive structure to be formed on said contact pad.

34. (Previously amended) The pre-formed solder mask of claim 33, wherein said at  
least one open aperture is configured to be positioned over and to expose a non-peripheral region  
of said contact pad.

C2  
35. (Twice amended) The pre-formed solder mask of claim 33, wherein said  
substantially uniform thickness of said film substantially corresponds to a desired height of said  
conductive structure.

C3  
36. (Amended) The pre-formed solder mask of claim 33, wherein said solder mask  
material is a polymer.

C4  
37. (Twice amended) The pre-formed solder mask of claim 33, wherein said solder  
mask material is formulated to shrink or degrade upon exposure to at least one of radiation, a  
plasma, and a shrinking agent.

41. (Amended) The pre-formed solder mask of claim 33, wherein said film is configured to be adhered to a substrate.

42. (Twice amended) The pre-formed solder mask of claim 33, further comprising an adhesive on a surface of said film.

43. (Twice amended) A pre-formed solder mask, comprising:  
a film of solder mask material comprising a polymer and having a substantially uniform thickness, said film including a surface configured to be adhered to a substrate; and  
at least one open aperture formed through said film and located correspondingly within said film to a contact pad location of a substrate upon which the pre-formed solder mask is to be disposed, said at least one open aperture configured to define a peripheral shape of a conductive structure to be formed on said contact pad.

44. The pre-formed solder mask of claim 43, wherein said at least one open aperture is configured to be positioned over and to expose a non-peripheral region of said contact pad.

45. (Twice amended) The pre-formed solder mask of claim 43, wherein said substantially uniform thickness of said film substantially corresponds to a desired height of said conductive structure.

46. (Amended) The pre-formed solder mask of claim 43, wherein said solder mask material is a polymer.

47. (Amended) The pre-formed solder mask of claim 43, wherein said solder mask material is formulated to shrink or degrade upon exposure to radiation, a plasma, or a shrinking agent.

48. (Amended) The pre-formed solder mask of claim 43, wherein said surface of said film includes an adhesive material.

49. (Twice amended) A semiconductor device assembly, comprising:  
a substrate including at least one contact pad;  
a pre-formed film of solder mask material comprising a polymer and disposed on said substrate, said pre-formed film having a substantially uniform thickness; and  
at least one open aperture formed through said pre-formed film and located correspondingly within said film to said at least one contact pad, said at least one open aperture configured to define a peripheral shape of a conductive structure to be formed therein.

50. The semiconductor device assembly of claim 49, further comprising a conductive structure substantially filling said at least one open aperture and in communication with said at least one contact.

51. (Amended) The semiconductor device assembly of claim 50, wherein said conductive structure protrudes beyond an exposed surface of said pre-formed film.

52. The semiconductor device assembly of claim 49, wherein said at least one open aperture is positioned over and exposes a non-peripheral region of said at least one contact pad.

53. (Amended) The semiconductor device assembly of claim 49, wherein said substantially uniform thickness of said pre-formed film is substantially equal to a height of said conductive structure.

54. (Amended) The semiconductor device assembly of claim 49, wherein said solder mask material is a polymer.

55. (Amended) The semiconductor device assembly of claim 49, wherein said solder mask material is formulated to shrink or degrade upon exposure to at least one of radiation, a plasma, and a shrinking agent.

56. (Amended) The semiconductor device assembly of claim 49, wherein said surface of said pre-formed film includes an adhesive material.

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